An Impact Study

of

"Lakshman" – A Nutritional Comic

THE INDIAN INSTITUTE OF PUBLIC OPINION; NEW DELHI.

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AN IMPACT STUDY OF "LAKSHMAN" — A NUTRITIONAL COMIC

INTRODUCTION

The Indian Institute of Public Opinion was entrusted with a survey of school children, their parents and teachers on behalf of CARE (The Cooperative for American Relief Everywhere) in April 1969. The study was designed to evaluate the impact of "Lakshman", a nutritional comic, on a representative cross-section of children, their parents and teachers.

Objectives of the Study

More specifically the study aimed at the following objectives:

i) ascertain if the school teachers show any hesitancy in distributing the book and if so the reasons for such reluctance;

ii) investigate whether children carry the book home and if so, whether they keep it as a 'prize' book or dispose it off or throw it away;

iii) ascertain the extent and nature of interest the book arouses amongst persons other than children, inside or outside their homes;

iv) measure the extent to which the book succeeds in initiating discussions on the subject of nutrition amongst children's families and other community members. Also the degree to which the book makes children more inquisitive about nutrition;

v) measure the extent to which the book succeeds in getting its message across to school children; also if this message is retained over time.

vi) measure the impact of the book:
(a) on nutritional awareness of children in semi-urban and rural sectors,
(b) on the receptivity to change in food habits both amongst children and their families.

vii) ascertain from teachers whether the book merits wide distribution and intensive reading in class rooms.

Three separate questionnaires, designed to cover these objectives, were operated on the samples of students, parents and teachers. In the second phase of student interviews — carried out to measure the extent to which the message of the book was retained over time — almost the same questions were repeated. All the three questionnaires were pre-tested in one school in the vicinity of Jaipur before the survey was put in the field.

The Sample

The survey covered six primary schools situated within a 20 kilometer radius of Jaipur where these books were distributed by representatives of CARE a couple of days before the date of interviews. The distribution of books was staggered with a view to ensuring an equal time gap between the actual interviews and distribution in all the schools. Four of the sample schools

belonged to rural, and two to semi-urban, (population between 5,000 to 25,000) areas. In each school 50 students — randomly selected in almost equal proportions from 2nd to 5th standards — were interviewed. The same students were interviewed again after 16 days; the time gap between the two interviews was equal in all cases.

Parents and guardians of 160 (against 150 in the sample plan) school children were interviewed after the first phase of student interviews was over.

The number of teachers to be interviewed in the sampling plan was 60 — 10 from each school. As it turned out, there were employed in all these schools no more than 29 teachers, including headmasters, all of whom were interviewed. This reduced number, the Institute is of the view, does not detract from the validity of the results obtained on this sample. If anything, their evaluation would seem to be more illuminating because it is now a census instead of a random sample.

The Field Work

The survey was put in the field on April 23, 1969. The first phase of student interviews was finished within three days before the terminal examinations started. Both parents and teachers were interviewed immediately after the first phase.

The second phase of student interviews was taken up after the examinations were over on 9th May. By then the attendance in schools had thinned very considerably. As a result, the Institute's investigators had to interview a large proportion

of their student respondents in their homes in the villages situated within a three mile radius of the schools. With the best efforts, however, nine students could not be traced as they had already left for distant places to spend their summer vacation. This small shortfall does not affect the results.

The Pattern of the Report

The report that follows is presented in three sections. In the first section an analysis of students' responses is attempted. In this analysis are presented, first the results of the first phase of student interviews, followed by the second. The results have been broken down by two variables — semi-urban vs. rural segments and the class in which the child was studying.

The second section deals with parents' responses. Here the results are analysed with reference to only one variable — education of respondents. In the third section, an attempt has been made to analyse teachers' responses.

A word here may be added about the tabulation and code scheme of the open-ended questions. In the presentation of tabulations, the wording and sequence of the questions is kept the same as used in the questionnaires operated in the field. In the coding of responses of open-ended questions, an attempt has been made to present, as it were, a complete picture. The responses which look irrelevant or inconsistent, therefore, have not been corrected and put under vague or 'don't know'

categories; also the responses which seemingly fit in one broad category have been separately coded not only for reasons of differences in emphasis but also to differentiate the more specific from the ones expressed in general terms.

SECTION I

AN ANALYSIS OF SCHOOL CHILDREN

The book seems to have fascinated most of the children. It aroused interest which was quite widespread and -- as the responses in the second phase interviews indicate – fairly enduring for a book of this type. The responses of children, however, cannot be characterised as entirely "spontaneous". The Institute's field research team got an impression that children had done some intensive reading before they were interviewed, presumably at the instance of teachers. But a form of 'induced impact' was written into the project design. The teachers were to be requested to read it in the classes and answer any questions the children chose to ask. The teachers in this case seem to have done their job well, perhaps rather more than was absolutely necessary.

A word here may be added about the differentials observed in rural, as against semi-urban, areas; also students in lower standards against those in the higher. It is seen that students of semi-urban schools were a little more keen on the book and showed greater awareness of the nutritional theme than those in the rural schools. The differentials, however, are not significantly large, ranging generally from 10 to 15 per cents in the 'don't know' category.

Inter-standard differentials, however, were significantly large. The students in the second standard, as is to be expected, were rather inarticulate in their expression and seemed more

interested in the pictures and certain episodes in the story. One thus observes a large 'don't know' element in their responses to questions designed to measure the impact on nutritional awareness. As one moves up in the scale of education, this element registers a corresponding decline. The responses of a significant majority of students in the fourth and fifth standards indicate that the book has succeeded, to a fair extent, in getting its message across. This is not to suggest it has been a complete waste on students in the lower standards.

A Measure of Children's Interest

Nearly all the children had the book on their person when they were interviewed the first time. In the second phase, however, a little over three-fourths said they had left it at home. Also, incidentally observed, was the good condition of the books which nearly one-fourth of the children carried on their person during the second phase. Only one per cent of the children, on their own evidence, had lost the book when our investigators met them again after two weeks.

Nearly all the children had themselves read the book at the time of first interview, besides having it read to them by others, largely teachers. And the reading seems to have been quite intensive. Only one-fourth said they had read the book only once, whereas nearly one-third claimed to have read it twice; almost the same proportion three times, and one-sixth even more than three. This interest in the book does not seem

to have flagged during the two weeks separating the two phases of interviewing. If anything it rather increased: 84 per cent claimed to have read the book once or more than once. One does not observe any differentials in this interest in terms of the standard to which the student belongs or the area (urban or rural) in which the school is situated.

Another measure of children's interest in the book is provided in their eagerness to show and even read this book to other members of their families. Five out of six children interviewed said they had shown it to other family members and six out of ten claimed to have read portions to them. Curiously, 50 per cent of children in the second standard also put forward this claim. Nevertheless, the responses of parents, on the whole, corroborate the claim of the older children.

Here one observes some urban-rural differentials. The children from semi-urban schools seem to have been a little more keen in showing and reading this book to other family members than those from rural schools.

Those students who said that other family members had also read their copy were further asked if they (family members) made any comments on the book. Two out of three children answered the question in the affirmative. All the comments, stated by students, were complimentary, though as is to be expected, expressed in general terms. The children's testimony of family members' opinion of the book — put forward by larger proportions in the second phase — was also corroborated by parents' interviews.

The Impact on Children

A series of questions was asked designed to ascertain, first, the general impression the book created on the minds of children, and, then by asking them to recall, step by step, certain episodes in the story to measure the extent and depth of their understanding of the story relevant to its nutritional message.

The broad conclusion that emerges from these responses is that the book has succeeded, to an appreciable extent, in getting its message across to a majority of students inasmuch as it is understood in broad outline though not in precise detail.

The children were first asked what, in particular, they liked about the book. Two-thirds said they liked both pictures and the story. There was hardly anything they did not like about the book except a small fraction of 2 per cent who said they did not like some 'vulgar, nude' pictures — the only instance when the tribal dress habits registered an adverse effect.

Most of the children (85% in the first phase and 74% in the second) claimed they had learnt something from the book. Probed further to specify what precisely they had learnt, the responses of four in ten hovered round the theme of food and health; one-fifth could not specify anything, whereas the interest of others seemed to have been arrested by certain episodes of the story and scenes in the book.

The attempt at measuring the impact through recall (in both phases) of selected episodes in the story, however, yielded results, that indicate that the theme of proper food and good health had registered with substantially larger proportions.

Thus when they were asked as to why Lakshman's father could not kill the tiger, one-third in the first phase and two-fifths in the second mentioned lack of 'good food', whereas one-fourth pointed to this lack 'during his childhood'. Amongst the students of the fifth standard the theme of 'proper food during childhood' registered with a substantially larger proportion (44%).

More or less the same pattern of responses is observed in regard to the factors the children thought were responsible for Lakshman's success in killing the tiger and his good health. Frequent references were made to 'good food' -- though not many specified what this 'good food' consisted of. However, when a direct question was asked on this point, almost everyone ventured an answer. This recall, it is observed, was in no case total, inasmuch as there were hardly any children who could recall all the items in Lakshman's menu. But sizeable proportions recalled three major items -- vegetables, Dal and Curd. Quite a few children, it was observed, would add to Lakshman's menu food items that were nowhere mentioned in the book — Ghee, butter and sweets. These additions, especially ghee and butter, seem quite natural for in these regions these food items are regarded as the most strength-giving.

The theme that good food is not only conducive to good health but also adds to beauty and charm seems to have registered with a significant proportion (more than half). This is seen in the responses to questions regarding Phalguni's popularity and charm in both the first and second phases of interviews. Indeed this awareness seems to have increased during the two weeks separating the two phases.

Most of the children (90%), when asked, said they would ask their parents to give them the type of food Lakshman and his family used to take. And six out of ten children, on their evidence, had already asked when they were interviewed again two weeks. Their parents had assured them that 'they would get it' whereas others were told they were 'already getting this type of food'. This is also corroborated by children's responses regarding the food items they claimed they were already getting at home: almost all children said they got vegetable and pulses and 85 per cent said they were also getting curds.

On Kitchen Garden

The emphasis on greater intake of vegetables, it is observed, received the attention of a large majority of school children covered in the survey. Vegetables was most frequently mentioned in Lakshman's menu and whenever they mentioned (in response to other questions) specific food items as constituents of 'good diet', vegetables were the first to figure. This is also seen in the total approval of the idea of 'kitchen garden'.

About one-fifth claimed already to have a kitchen garden. Most of the others said they would like to have one and would ask their parents to arrange one in their own homes.

The reasons advanced by these children for having a kitchen garden are not without interest. A majority of them said they would have more vegetables and thus grow strong and healthy. About one-third, in the second phase, said a kitchen garden would provide them 'fresh vegetables'. A small proportion (6 per cent) also brought in the business angle — they would eat more vegetables and earn as well by selling in the market.

The broad conclusion that emerges from these responses would seem to be that the book succeeded, to an appreciable extent, in what it claims: making children more conscious of nutrition. The message in broad form, rather than in precise detail, has been driven home, making children more inquisitive on the subject. The abiding kind of interest, the children have shown in the book — as evidenced in their responses in the second phase which were marked by slightly greater understanding of the book relevant to its nutritional theme -- indicates the need for its wider distribution. This conclusion is also corroborated by the responses of parents and teachers.

An Evaluation Study of "Lakshman" — A Nutritional Comic

School Children — First Phase

Percentages

Did you receive this book?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
BASE:	300	100	200	72	72	78	78
Yes	100	100	100	100	100	100	100
No	-	-	-	-	-	-	-
Total	100	100	100	100	100	100	100
If 'Yes' Where is the book now?							
At home	1	2	-	3	-	-	1
With me in the satchel	99	98	100	97	100	100	99
Neither at home nor in the satchel	-	-	-	-	-	-	-
Total	100	100	100	100	100	100	100
If the child has got the book with him or at home Who gave you this book?							
Our teacher	85	91	82	96	82	78	87
Headmaster	12	9	13	4	10	18	12
Class fellow	1	-	2	-	3	3	-
Student of another class	-	-	-	-	-	-	-
Others	2	-	3	-	5	1	1
Total	100	100	100	100	100	100	100
Have you read the book yourself or did someone read it to you?							
Read it myself	42	28	50	45	48	38	39
Someone read it to me	3	3	3	11	1	-	-
Someone read it to me but later I read it myself	49	62	42	39	47	54	54
I read it myself but later someone read it to me	5	6	5	2	4	8	7
Neither read it nor did anyone read to me	1	1	..	3	-	-	-
Total	100	100	100	100	100	100	100

If someone read it to the child Who read it to you?	Percentages Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Teacher in the class room	55	66	50	50	51	57	61
A member of the family	2	5	..	2	1	5	-
A student from higher standard	-	-	-	-	-	-	-
Not applicable	43	29	50	48	48	38	39
Total	100	100	100	100	100	100	100

If the child had read the book or someone read to him How many times have you read it and/or was it read to you?							
Read it myself - times							
One	26	34	22	26	34	21	24
Two	32	32	32	26	30	31	39
Three	31	17	22	20	17	26	20
Four	11	7	14	9	10	15	11
Five	4	5	4	4	4	5	4
More than five	2	1	3	1	4	2	2
Not applicable	4	4	3	14	1	-	-
Total	100	100	100	100	100	100	100
Someone read it to me - times							
One	54	68	48	50	49	60	58
More than once	3	3	2	2	3	2	3
Not applicable	43	29	50	48	48	38	39
Total	100	100	100	100	100	100	100

	Percentages						
	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Have you shown this book to any body? If so, to whom?							
Friends	15	31	7	9	13	19	17
Father	58	62	56	51	64	65	50
Mother	50	55	48	47	54	56	42
Brothers	42	56	35	45	48	36	40
Sisters	28	39	23	29	29	29	27
Others - teacher, uncle	4	5	4	4	3	3	7
None	17	8	21	23	16	12	19
Base	*	*	*	*	*	*	*
Have you read this book to any body? If so, to whom?							
Friends	6	9	4	3	4	8	7
Father	34	35	34	30	35	38	34
Mother	31	33	30	23	32	36	30
Brothers	17	18	17	9	23	17	19
Sisters	10	18	6	8	9	9	14
Others - teacher, uncle	3	4	3	1	3	4	5
None	39	30	43	50	38	32	36
Base	*	*	*	*	*	*	*
Has anyone else read your book? If so, who?							
Father	15	19	13	18	13	18	11
Mother	3	7	..	6	3	3	-
Brothers	33	46	26	27	38	34	33
Sisters	17	31	11	14	19	18	17
Friends	12	24	7	8	13	13	15
Others - uncle	1	-	1	-	-	1	2
No - None else	50	37	57	59	52	42	50
Base	*	*	*	*	*	*	*

*Note: No check: Provision for multiple answers.

	Percentages						
	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Brothers — How many?							
One	19	23	19	16	24	22	22
Two	4	6	3	6	4	-	6
Three	4	7	2	-	6	8	-
Four	3	4	2	3	3	2	3
Five	2	4	..	1	1	2	1
Six	1	2	-	1	-	-	1
Brother did not read	17	17	17	14	10	24	17
Not applicable	50	37	57	59	52	42	50
Total	100	100	100	100	100	100	100
Sisters — How many?							
One	9	16	7	8	9	16	7
Two	3	5	2	-	5	-	6
Three	3	8	1	6	4	1	2
Four	1	1	1	-	1	1	-
Five	1	1	..	-	-	-	2
Sister did not read	33	32	32	27	29	40	33
Not applicable	50	37	57	59	52	42	50
Total	100	100	100	100	100	100	100
Friends — How many?							
One	4	4	5	7	7	2	2
Two	2	6	-	1	-	4	3
Three	1	4	-	-	3	1	1
Four	2	4	..	-	-	3	4
Five	2	3	2	-	2	3	3
More than five	1	3	-	-	1	-	2
Friends did not read	38	39	36	33	35	45	35
Not applicable	50	37	57	59	52	42	50
Total	100	100	100	100	100	100	100

Percentages

If the book was read by the members of the family	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Did they talk about the book in the family?							
Yes	33	38	30	24	32	35	38
No	17	25	13	17	16	23	12
Not applicable	50	37	57	59	52	42	50
Total	100	100	100	100	100	100	100
If 'Yes' What did they say?							
General comments: A good book	16	16	16	12	12	18	21
General comments: Educative - one can learn 'good things'	4	5	4	1	6	2	6
Talked about the theme: good food and health; Lakshman could kill the tiger because he got good diet; kitchen garden	3	5	2	-	4	7	3
Enquired about as to who gave the book	3	5	2	3	2	4	3
Asked me to read it carefully to get through the examination	2	2	1	4	1	1	-
Talked about the story	1	1	2	1	3	-	1
Others: Good pictures, preserve it	2	2	2	2	1	2	1
Unable to specify	2	4	1	1	3	1	3
Not applicable	67	62	70	76	68	65	62
Total	100	100	100	100	100	100	100

NOW LET US TALK ABOUT THIS BOOK	Percentages						
	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
First tell me. Did you like this book?							
Yes	98	98	98	94	99	100	99
No	1	2	-	1	-	-	1
Can't follow what is it about	1	-	2	5	1	-	-
Total	100	100	100	100	100	100	100
If 'Yes' What, in particular, did you like about this book?							
Liked the story only	27	11	35	26	25	30	26
Liked pictures only	6	5	6	10	8	5	1
Liked both pictures and story	65	82	57	58	66	65	72
Not applicable	2	2	2	6	1	-	1
Total	100	100	100	100	100	100	100
What else did you like about the book?							
Picture of Tiger	11	10	11	15	8	13	7
Lakshman	7	8	6	8	6	6	6
'Good things' conveyed in the book: kitchen garden, how to grow more vegetables	7	9	5	1	5	9	10
Some scenes: Lakshman killing the tiger; shooting contest; Jungle scenes etc.	4	5	3	1	3	8	4
Lakshman's family	3	7	1	4	-	4	4
Others - vegetables, Jethu	6	11	3	3	4	9	6
Can't say	69	60	74	70	78	60	69
Base	*	*	*	*	*	*	*

*Note: No check: Provision for multiple answers.

Percentages

What, in particular, did you not like about this book?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Some "vulgar" pictures	2	-	3	1	3	-	4
Tiger killing Jethu	..	1	-	-	-	1	-
References to meat eating	1	1	-	-	-	-	1
Tiger	1	1	-	-	-	3	-
Others	..	1	-	-	1	-	-
Nothing	96	96	97	99	96	96	95
Total	100	100	100	100	100	100	100
Have you learnt something from this book?							
Yes	85	86	85	70	81	95	94
No	14	12	15	29	18	4	6
Can't say	1	2	..	1	1	1	-
Total	100	100	100	100	100	100	100
If 'Yes' Tell me what have you learnt from this book? Take your time and then tell me?							
Eat good food to grow up healthy - General response	33	31	34	12	23	40	52
Mentioned certain episodes in the story without reference to food or health	10	10	9	9	8	14	7
Mentioned specific food items (vegetables, pulses, fruits etc.) that one should take to grow healthy	5	4	6	6	5	4	6
Learnt things about jungles and tigers	5	4	6	4	9	6	1
Kitchen garden: how to grow more vegetables	4	4	3	3	1	8	2
Lakshman was strong, he could kill the tiger/Jethu was weak he could not kill the tiger	2	4	1	1	1	2	4
**Others	11	15	9	12	8	15	9
Unable to specify	19	16	20	23	26	12	15
Not applicable	15	14	15	30	19	5	6
Base	*	*	*	*	*	*	*

**Others: Geography; Study hard; Obey teachers; We should help our parents; Be fearless; Active.

*Note: No check: Provision for multiple answers.

Percentages

Now let us try to recall the story you have read in this book. Do you remember who killed the tiger?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Lakshman	91	91	91	71	95	94	100
Don't remember	9	9	9	29	5	6	-
Total	100	100	100	100	100	100	100
Why could not Jethu, his father, kill the tiger?							
He was weak	57	64	53	24	47	62	85
Could not shoot well	10	11	9	11	14	12	2
**Other answers	8	8	9	4	14	10	4
Don't know	26	20	30	62	25	16	9
Base	*	*	*	*	*	*	*
UNLESS "DON'T KNOW" What was the reason?							
He did not get good food — General response	30	27	32	17	29	38	36
He did not get good food during his childhood	24	29	22	6	19	25	44
He became nervous and scared	4	4	4	-	8	5	1
Old age	1	2	..	-	-	4	-
Could not get good food as he was poor	..	-	..	-	-	1	-
***Others	5	8	4	1	5	9	5
Unable to specify	10	8	10	14	16	9	1
No reply	..	1	-	-	-	-	1
Not applicable	26	20	30	62	25	16	9
Base	*	*	*	*	*	*	*

**Others: He was old; He had bad habits; He was afraid of the tiger; He was not getting right type of food; Died before he could kill the tiger

***Others: He was illiterate; His eyesight was weak; Used to take milk in a hurry.

*Note: No check: Provision for multiple answers.

How could Lakshman kill the tiger when his father could not?	Percentages						
	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
He got good food and was strong — General response	48	45	48	23	43	53	69
He knew how to shoot a tiger; He could shoot well in time	10	12	9	10	12	12	6
He got good food since childhood	5	11	2	3	4	2	11
He was brave	4	1	6	6	5	2	4
He was strong as he used to take vegetables, fruits, milk and curd	2	2	2	1	4	2	-
He was strong and healthy and intelligent -- did not mention good food etc.	1	-	2	-	-	2	1
Others - With arrow; Mangal helped him	3	7	1	-	2	6	2
Can't say	29	25	31	58	21	21	9
Base	*	*	*	*	*	*	*
How is it that Lakshman grew up into a strong and healthy boy when his father was weak?							
He got good food - General response	49	53	47	38	53	54	49
He got good food - since childhood; parents cared	19	27	15	4	9	21	39
Mentioned specific food items - vegetables, milk, curd, pulses etc.	12	9	14	12	14	14	7
Others - He was young	2	2	1	1	2	1	1
Don't know	19	11	22	41	22	10	5
No reply	1	1	1	4	-	-	-
Base	*	*	*	*	*	*	*

*Note: No check: Provision for multiple answers.

Can you recall what kind of food Lakshman's parents used to give him?	Percentages		
	Total sample	Semi-urban	Rural
Vegetables	62	59	64
Dal	46	43	47
Fruits	23	20	24
Milk	44	43	44
Curd	32	30	34
Roti	10	14	8
Ghee	8	10	7
Butter	9	18	5
Bread	8	5	10
Sweets	2	3	2
Eggs	4	4	5
Fish	3	4	3
Meat	4	2	5
Sag	1	3	1
Butter - milk	1	1	1
Rice	-	-	3
Don't know	14	17	13
Base	*	*	*

*Note: No check: Provision for multiple answers.

Percentages

	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Do you intend to ask your parents to give you this kind of food?							
Yes	90	95	90	79	90	94	95
No	4	5	4	6	4	2	5
No answer	6	5	6	15	6	4	-
Total	100	100	100	100	100	100	100
If 'No', Why?							
Poor	1	2	1	-	2	1	1
Don't take eggs, meat	..	1	-	-	-	-	1
Already get all things	..	-	..	-	1	-	-
Can't say	3	2	3	6	1	1	3
Not applicable	96	95	96	94	96	98	95
Total	100	100	100	100	100	100	100
Now, would you tell me how could Lakshman's family have the kind of food they were having although they were not rich?							
They had a kitchen garden where they grew vegetables	54	61	50	36	43	65	67
They used to work hard in their fields	2	5	1	3	-	5	1
'Got it from the bazaar'	2	1	2	2	4	1	1
**Others	5	6	4	3	6	1	8
Don't know	36	24	42	53	44	27	23
No reply	1	3	1	3	3	1	-
Total	100	100	100	100	100	100	100

**Others: Lakshman was a god; His mother managed as she knew that good food will make him strong; They loved good food; His mother was very good.

Percentages

You know Lakshman had a sister named Phalguni. Can you tell me why was Phalguni popular?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Was beautiful & charming	33	34	32	14	21	45	49
Had good health	13	16	12	7	2	16	26
She was a 'good girl'	6	14	2	7	6	6	4
Used to take good diet	5	5	5	-	6	4	9
She used to work hard	3	2	3	3	5	2	1
Laxman's sister	3	3	3	1	6	1	2
Her eyes were bright	2	5	..	1	1	1	4
Dressed well — good clothes, ornaments	2	4	1	1	4	1	1
Well behaved, obedient	2	3	1	3	2	1	1
**Others	8	13	6	3	5	5	19
Don't know	36	22	43	64	43	30	12
No reply	2	3	2	3	4	1	1
Base	*	*	*	*	*	*	*
What made her beautiful and charming?							
Used to take good food; proper diet	45	51	42	20	43	53	60
Used to take bath daily	6	9	5	6	5	10	4
Well-fed from childhood	5	8	3	-	4	5	9
Used to take lot of vegetables and fruits	5	4	5	1	4	5	7
Dressed well	4	6	3	6	5	4	2
Used to love everyone	2	2	2	1	-	1	5
Live 'properly'	1	2	..	-	2	1	-
Don't know	42	33	47	74	43	34	22
Base	*	*	*	*	*	*	*

**Others:- Good natured; Good hair; Lived there for a long time; Could dance; Used to feed others.

*Note: No check: Provision for multiple answers.

You remember Lakshman used to help the teacher in the school. Now let us see if you can recall what Lakshman used to say to the boys in the school. Take your time.	Percentages						
	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
We should take good food--General response	20	24	19	14	18	23	25
Study well, read good books	6	2	8	4	8	9	2
Used to tell them 'good things', 'teach them'	3	5	2	3	2	4	4
Grow more vegetables; have kitchen gardens	3	5	2	1	-	2	6
Take good/proper diet and you would grow healthy	2	6	..	-	-	2	6
'Healthy body, healthy mind'	2	2	2	-	-	2	5
**Others	8	10	6	7	5	6	11
Don't know	63	52	68	79	69	58	48
Base	*	*	*	*	*	*	*

UNLESS 'DON'T KNOW/REMEMBER' Do you intend to follow Lakshman's advice?							
Yes	30	44	24	18	27	33	41
No	..	-	..	-	-	-	1
No reply	7	4	8	3	4	9	10
Not applicable	63	52	68	79	69	58	48
Total	100	100	100	100	100	100	100

**Others: Keep good company; we should learn how to kill the tiger; we should clean our teeth daily; respect your parents; used to sing.

*Note: No check: Provision for multiple answers.

You remember Lakshman's family was having a small kitchen garden where they grew all kinds of vegetables. Would you also like to have such a kitchen garden?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
	Percentages						
Yes	73	73	73	62	78	78	74
No	4	2	5	12	2	1	-
Already have one	19	22	18	12	19	21	25
Can't say	4	3	4	14	1	-	1
Total	100	100	100	100	100	100	100
If 'Yes' Will you ask your parents to have one in your home?							
Yes	72	73	71	62	77	76	73
No	1	-	1	-	1	1	1
Can't say	..	-	1	-	-	1	-
Not applicable	27	27	27	38	22	22	26
Total	100	100	100	100	100	100	100
If 'Yes' Why would you like to have a kitchen garden?							
Can have more vegetables and grow strong	50	45	53	39	47	53	59
Can have fruits daily	13	9	15	11	12	17	12
Will get fresh vegetables	5	7	3	4	2	5	6
We can both eat more vegetables and earn more money	3	1	4	3	4	2	2
We can earn more by selling vegetables	3	3	3	1	4	2	2
Will get good food	1	3	..	-	1	2	1
Others	3	4	2	1	1	5	2
Can't say	6	7	6	7	13	2	2
Not applicable	28	27	29	38	23	24	27
Base	*	*	*	*	*	*	*

*Note: No check: Provision for multiple answers.

If 'No', Why won't you ask your parents?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
	Percentages						
No answer	1	-	1	-	1	1	1
Not applicable	99	100	99	100	99	99	99
Total	100	100	100	100	100	100	100

What sort of food do you get at home? What sort of food would you like to take?

GET AT HOME							
Vegetables	99	98	99	97	99	99	100
Fruits	77	79	75	70	75	82	79
Pulses	98	98	98	95	100	98	99
Milk	52	87	85	83	83	91	85
Curd	85	80	88	80	82	90	87
Eggs	13	16	12	17	9	14	14
Meat	12	16	9	14	4	14	15
Fish	9	14	6	12	2	10	11
Others	6	11	3	9	4	2	7
No answer	1	1	..	3	-	-	-
Base	*	*	*	*	*	*	*
WOULD LIKE TO TAKE							
Vegetables	57	40	66	51	60	62	55
Fruits	67	44	81	71	71	71	61
Pulses	58	41	67	48	58	66	57
Milk	69	44	81	68	70	71	66
Curd	65	40	77	62	66	69	61
Eggs	10	6	12	9	6	12	11
Meat	9	5	11	9	6	8	12
Fish	7	4	8	6	5	5	10
Others	7	16	3	12	5	8	5
No reply	22	41	13	20	22	21	26
Base	*	*	*	*	*	*	*

*Note: No check: Provision for multiple answers.

Now tell me would you like to read more books like the one you have got?	Percentages						
	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Yes	97	98	97	90	100	98	100
No	2	1	2	7	-	1	-
No answer	1	1	1	3	-	1	-
Total	100	100	100	100	100	100	100
Why?							
Will learn 'new things', add to my knowledge	44	57	37	20	36	54	60
Like the story -- interesting	21	13	25	20	21	18	24
Like pictures	6	3	8	6	8	4	7
Will qualify in the examination	2	2	2	1	5	1	-
**Others	16	18	16	24	16	13	14
Unable to give reason	15	12	16	26	18	12	5
Not applicable	3	2	3	10	-	2	-
Base	*	*	*	*	*	*	*

**Others: To remember by heart; In order to have good diet; To keep good health; Like story books; Collect books

*Note: No check: Provision for multiple answers.

An Evaluation Study of Lakshman — A Nutritional Comic

School Children — Second Phase

Percentages

Did you receive this book?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
BASE:	291	97	194	69	70	77	75
If 'Yes' Where is the book now?							
At home	77	93	69	73	73	81	80
With me in the satchel	22	7	29	27	23	19	19
Neither at home nor in the satchel	1	-	2	-	4	-	1
Total	100	100	100	100	100	100	100
If the child does not Possess the book							
What happened to the book?							
Stolen	1	-	2	-	3	-	1
Threw it away	..	-	..	-	1	-	-
Not applicable	99	100	98	100	96	100	99
Total	100	100	100	100	100	100	100
Have you read the book or was it read to you again since we met last? Have you read more than once?							
Read it once	30	45	22	18	23	42	35
Read - more than once	54	36	63	60	62	48	47
Was read to me once	1	2	1	-	1	1	1
Was read to me more than once	2	4	1	.2	-	5	1
Was not read to me	98	96	99	98	100	95	99
Did not read again	15	17	14	22	14	9	17
Base	*	*	*	*	*	*	*

*Note: No check: Provision for multiple answers.

Percentages

Has anyone else read your copy of the book since we met last? If yes, who?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Father	16	16	15	16	14	16	18
Mother	5	12	2	5	8	3	6
Brothers	28	34	25	17	28	32	31
Sisters	10	16	7	5	8	10	17
Friends	1	-	1	-	-	-	3
Others: aunt, uncle, neighbours	8	6	9	3	5	12	10
No — None else	44	38	47	63	47	39	31
Base	*	*	*	*	*	*	*
What did they say about it?							
General comments: A good book	25	24	25	11	20	26	39
Talked about the theme: Good food and health; Lakshman could kill the tiger because he got good diet; kitchen garden	4	6	4	3	1	6	6
Enquired about as to who gave the book	4	4	5	5	6	4	4
General comments: Educative -- One can learn 'good things'	3	7	1	-	3	5	3
Talked about the story	3	3	2	2	4	3	1
Others: Good pictures, preserve it	1	2	1	-	-	3	3
Unable to specify	16	19	15	16	19	17	14
Not applicable	44	38	47	63	47	39	31
Base	*	*	*	*	*	*	*
What, in particular, did you like about this book?							
Liked the story	32	22	37	46	30	31	22
Liked pictures only	4	6	4	10	3	5	1
Liked both pictures and story	64	72	59	44	67	64	77
Total	100	100	100	100	100	100	100

*Note: No check: Provision for multiple answers.

What else did you like about the book?	Percentages						
	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Lakshman	8	5	10	8	8	11	5
Picture of tiger	8	3	10	14	8	4	5
Some scenes: Lakshman killing the tiger; shooting contest; jungle scenes etc.	3	8	-	3	1	4	3
'Good things' conveyed in the book: kitchen garden; how to grow more vegetables	2	2	2	3	-	1	3
Lakshman's family	1	1	1	2	-	-	1
Others: Phalguni, Jethu, Printing	2	4	1	-	2	3	4
Can't say	78	77	79	71	81	77	83
Base	*	*	*	*	*	*	*
What, in particular, did you not like about this book?							
Tiger	4	1	6	6	7	3	1
Some 'vulgar' pictures	3	2	4	3	-	5	5
Jethu	2	2	2	2	3	4	-
Tiger killing Jethu	1	1	..	-	-	1	1
References to meat eating	..	1	-	-	-	-	1
Others	1	2	-	-	-	1	2
Nothing	89	91	88	89	90	86	90
Total	100	100	100	100	100	100	100
Have you learnt something from this book?							
Yes	74	75	74	57	61	88	87
No	24	24	24	40	38	9	13
Can't say	2	1	2	3	1	3	-
Total	100	100	100	100	100	100	100

*Note: No check: Provision for multiple answers.

If 'Yes'
Tell me what have you learnt from this book? Take your time and then tell me.

	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
	Percentages						
Eat good food to grow up healthy — General response	34	23	39	19	25	32	55
Mentioned specific food items (vegetables, pulses, fruits etc.) that one should take to grow healthy	7	13	4	3	4	10	10
Mentioned certain episodes in the story without reference to food or health	7	9	5	6	3	12	5
Kitchen garden: How to grow more vegetables	6	9	5	-	3	9	12
Lakshman was strong he could kill the tiger/Jethu was weak, he could not kill the tiger	3	4	3	3	1	4	4
Learnt things about jungles and tigers	1	2	1	3	1	1	-
**Others	9	8	9	10	11	13	1
Unable to specify	10	8	10	13	14	10	3
Not applicable	26	25	26	43	39	12	13
Base	*	*	*	*	*	*	*

Now let us try to recall the story you have read in this book. Do you remember who killed the tiger?

Lakshman	93	91	94	79	92	100	97
Don't remember	7	9	6	21	8	-	3
Total	100	100	100	100	100	100	100

**Others: Children should read good books; Healthy body healthy mind; Should not get nervous in any situation.

*No check: Provision for multiple answers.

Why couldn't Jethu, his father, kill the tiger?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
	Percentages						
He was weak	73	69	75	52	58	83	93
Could not shoot well	3	7	-	2	3	5	-
His eyesight was weak	..	1	-	-	-	1	-
Others: Did not get good diet; could not pick up the bow in time	6	8	5	-	15	7	3
Don't know	18	15	20	46	24	4	4
Total	100	100	100	100	100	100	100
UNLESS "DON'T KNOW" What was the reason?							
He did not get good food — General response	40	43	39	30	28	47	53
He did not get good food during his childhood	26	22	23	10	19	27	33
His parents could not give proper food as they did not know what was good for health	2	3	2	-	3	3	4
Could not get good food as he was poor	2	2	2	2	4	1	3
He became nervous and scared	2	2	2	-	1	5	1
Old age	..	1	-	-	-	-	1
Others: He had bad habits He did not get vegetables to eat	1	3	1	-	3	3	-
Unable to specify	11	11	11	13	19	10	3
Not applicable	18	15	20	46	24	4	4
Base	*	*	*	*	*	*	*

*Note: No check: Provision for multiple answers.

	Percentages						
	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
How could Lakshman kill the tiger when his father could not?							
He was strong	35	37	35	17	41	49	31
He got good food and was strong	21	18	23	22	14	21	27
He knew how to shoot a tiger; He could shoot well in time	8	12	6	14	7	9	4
He was healthy	8	9	7	2	5	6	17
He was brave	7	4	8	2	8	5	10
He got good food since childhood	5	3	6	2	1	6	9
He was strong and healthy and intelligent — did not mention good food etc.	2	-	3	-	1	1	4
He was strong as he used to take vegetables, fruits, milk and curd	1	2	1	2	-	1	3
Others - Swift in movement	2	4	1	3	3	3	-
Can't say	21	18	23	38	28	12	9
Base	*	*	*	*	*	*	*
How is it that Lakshman grew up into a strong and healthy boy when his father was weak?							
He got good food — General response	58	53	61	46	61	69	56
He got good food - since childhood; parents cared	18	18	18	6	9	20	31
Mentioned specific food items - vegetables, milk, curd, pulses etc.	9	17	5	11	6	8	12
He used to take milk	..	1	-	-	1	-	-
Others	1	1	1	-	3	-	1
Don't know	14	10	15	37	20	3	-
Total	100	100	100	100	100	100	100

*Note: No check: Provision for multiple answers.

Can you recall what kind of food Lakshman's parents used to give him?	Percentages		
	Total sample	Semi-urban	Rural
Vegetables	83	81	84
Dal	66	65	66
Fruits	19	21	18
Milk	42	41	42
Curd	26	31	24
Roti	14	20	11
Ghee	9	11	8
Butter	14	16	13
Bread	1	-	2
Sweets	1	4	1
Eggs	8	6	9
Fish	5	5	6
Meat	9	8	10
Sag	1	1	1
Butter - milk	2	3	1
Rice	1	-	1
Don't know	4	5	4
Base	*	*	*

*Note: No check: Provision for multiple answers.

Percentages

Do you intend to ask your parents to give you this kind of food or is it you have already asked?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Yes, already asked	60	65	58	46	58	73	62
Yes, would ask	28	22	31	35	34	18	26
No, would not ask	7	7	6	8	3	6	9
No reply	1	1	1	3	-	-	-
Not applicable	4	5	4	8	5	3	3
Total	100	100	100	100	100	100	100
If already asked What did they say?							
You will have it	46	46	47	40	47	54	44
You are already having this kind of food	8	15	4	5	7	9	10
Make a kitchen garden of your own and you will have it	2	1	2	-	2	3	3
Can't afford	2	2	2	1	1	4	-
Others: Vegetarian, work hard (studies) become a good man	2	1	3	-	1	3	5
Not applicable	40	35	42	54	42	27	38
Total	100	100	100	100	100	100	100
If 'No' Why?							
Poor/Can't afford	3	3	3	5	-	4	3
Already giving good food	1	2	1	-	1	-	3
I am a vegetarian	1	2		2	-	1	1
No land		-		-	-	1	-
Others	1	-	1	-	-	-	1
Can't say	1	-	1	1	2	-	1
Not applicable	93	93	94	92	97	94	91
Total	100	100	100	100	100	100	100

	Percentages						
	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Now, would you tell me how could Lakshman's family have the kind of food they were having although they were not rich?							
They had a kitchen garden where they grew vegetables	57	66	53	35	51	70	69
Got it from the bazaar	4	2	5	8	4	4	-
They used to work hard in their fields	1	1	1	-	3	1	1
Others: They got money from their kitchen garden	3	3	2	2	3	3	3
Don't know	35	29	39	55	39	23	27
Base	*	*	*	*	*	*	*
You know Lakshman had a sister named Phalguni. Can you tell me why was Phalguni popular?							
She was beautiful and charming	55	51	57	32	46	62	75
Had good health	11	10	11	5	4	12	21
Was a 'good girl'	3	5	2	5	3	1	4
Used to take good diet	3	7	1	3	4	3	1
She used to work hard	2	1	3	2	3	-	4
Her eyes were bright	1	2	-	2	-	-	1
Well-behaved	1	1	1	-	-	1	1
**Others	4	5	7	3	4	5	4
Don't know	30	30	30	52	42	25	6
No reply	..	-	1	-	1	-	-
Base	*	*	*	*	*	*	*

**Others: Laxman's sister; Bright, Clever & good figure; She was fat; She danced in fair, used to dance.

*Note: No check: Provision for multiple answers.

What made her beautiful and charming?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
	Percentages						
Used to take good food, proper diet	59	59	60	46	53	65	71
Used to take lot of vegetables and fruits	8	9	7	3	4	10	13
Well-fed from childhood	5	3	6	-	5	7	8
Dressed well	3	3	4	2	5	1	5
Used to take bath daily	2	5	1	3	1	1	4
Good health	2	2	2	-	1	3	3
Unmarried	1	3	-	2	1	-	1
Don't know	23	19	25	46	30	16	4
Base	*	*	*	*	*	*	*

You remember Lakshman used to help the teacher in the school. Now let us see if you can recall what he used to say to the boys in the school. Take your time?							
We should take good food — General response	20	24	18	8	16	26	26
Take good/proper diet and you would grow healthy	7	9	5	3	-	8	14
'Healthy body, healthy mind'	4	5	4	2	1	5	9
Grow more vegetables; have kitchen gardens	4	3	5	-	1	3	13
Study well, read good books	4	4	4	5	5	3	4
Used to tell them 'good things', 'teach them'	1	-	2	2	-	3	1
Work hard	1	-	2	3	1	-	-
**Others	4	5	4	2	4	5	5
Don't remember	61	55	64	78	76	55	39
Base	*	*	*	*	*	*	*

**Others: Neat & clean; should not be scared of tiger; respect; use vegetables and pulses; dress well.

*Note: No check: Provision for multiple answers.

Percentages

UNLESS "DON'T REMEMBER"	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Do you intend to follow Lakshman's advice?							
Yes	39	44	36	22	24	45	60
No	..	1	-	-	-	-	1
Not applicable	61	55	64	78	76	55	39
Total	100	100	100	100	100	100	100
You remember Lakshman's family was having a small kitchen garden where they grew all kinds of vegetables. Would you also like to have such a kitchen garden?							
Yes	93	90	94	81	95	95	99
No	7	10	5	17	5	5	1
Can't say	..	-	1	2	-	-	-
Total	100	100	100	100	100	100	100
If 'Yes' Will you ask your parents to have one in your home?							
Yes	75	74	75	69	70	78	82
No	5	1	7	6	7	1	5
Already having	13	15	12	6	16	16	12
No answer	..	-	..	-	2	-	-
Not applicable	7	10	6	19	5	5	1
Total	100	100	100	100	100	100	100

Percentages

If 'Yes' Why would you like to have a kitchen garden?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Can have more vegetables and grow strong	32	31	32	16	27	40	40
Will get fresh vegetables	31	29	32	32	30	32	30
Can have fruits daily	14	10	16	6	15	16	18
We can both eat more vegetables and earn more money	2	5	1	2	3	4	1
Shall get fresh vegetables and save money	2	6	-	2	3	1	3
We can earn more by selling vegetables	1	2	1	2	-	1	3
Will get 'good food'	1	-	2	2	-	3	-
Others: To have more pulses; to become more powerful	3	2	3	3	3	3	3
Can't say	19	15	21	22	26	10	18
Not applicable	7	10	6	19	5	5	1
Base	*	*	*	*	*	*	*

If 'No' Why won't you ask your parents?							
No land	2	1	3	5	2	-	4
Already have one	1	-	1	1	1	-	-
Don't know	2	-	3	-	4	1	1
Not applicable	95	99	93	94	93	99	95
Total	100	100	100	100	100	100	100

*Note: No check: Provision for multiple answers.

Percentages

Now tell me would you like to read more books like the one you have got?	Total sample	Semi-urban	Rural	CLASS Second	Third	Fourth	Fifth
Yes	96	97	96	87	100	97	99
No	4	3	4	13	-	3	1
Total	100	100	100	100	100	100	100
Why?							
Like the story — interesting	45	36	49	43	51	44	40
Will learn 'new things'; add to my knowledge	36	47	25	16	24	47	53
Like pictures	12	19	9	8	12	18	9
Will qualify in the examination	3	3	3	10	3	-	-
Can't understand	1	2	1	5	-	-	-
**Others	5	6	4	6	4	4	5
Unable to give reason	13	9	15	21	18	8	6
Not applicable	4	3	4	13	-	3	1
Base	*	*	*	*	*	*	*

**Others: How to become healthy; eat & live well; keeps person occupied and happy; will learn new stories.

*Note: No check: Provision for multiple answers.

SECTION II

PARENTS' ASSESSMENT

Parents of selected children were interviewed five days after the distribution. This time period was sufficient to enable parents to answer the kind of questions that were asked about the book. Their testimony regarding children's interest in the book and their personal evaluation of the book, however, should be read in the context of the educational background of these respondents. The largest single segment (46%) was illiterate whereas nearly one-fourth had received no education beyond the primary stage; about one-third were more qualified.

The Extent of Children's Interest — Parents' Testimony

The book, on survey evidence, did not go unnoticed in a large majority of the homes of children. Nearly four-fifths of the parents and guardians had seen the book which most of them testified their children were 'quite eager' to show it to them. Only half of those who could read had themselves read the book. But it is a measure of the children's interest in the book that they read it to a large majority of those who either had not read or could not read. This corroborates the children's testimony on this point.

A majority of the parents and guardians who had observed the children reading the book said they (children) had shown interest in both the story and its message, whereas one-fourth (largely guardians of younger children, the survey team observed) said they had shown interest in pictures only.

Though one observes a slightly greater eagerness on the part of children of the more educated, the differences are not very significant. Further, one would expect the lack of parents' education to inhibit expression of children's inquisitiveness as seen in the extent and nature of the questions they would ask regarding such books. Here again differentials are marginal. On the other hand, the comparison between the extent and nature of questions asked of parents and those of teachers seem to suggest that most of the children --whether of the educated or the illiterate --thought it was their teachers rather than parents who were the right persons to answer such questions.

Evaluation of the Book

The book, on survey evidence, had initiated discussions regarding its theme amongst the older members in a little over one-fourth of the families. This figure may not seem very impressive. But the Institute is of the view that for a book of this type to initiate discussions even in one out of four rural families is very significant.

One observes a sizeable (two-fifths) 'don't know' element in parents assessment of the book. However, most of those who expressed an opinion, were of the view that the book was both "interesting and instructive" and most of them felt the message could be understood by their wards without help. Their own understanding of the message, however, was not very precise:

"Good food is essential for good health (11%); children should be fed properly from early age (16%)." Only 17 per cent expressed their understanding of the theme in less imprecise form, referring to kitchen gardens and vegetables.

Notwithstanding this inadequate appreciation of the theme, a majority of the respondents felt that what the book attempts to convey was applicable to their families; only 8 per cent found it irrelevant. What is more significant, six out of ten respondents said they would like to introduce changes in their food habits. The idea of kitchen gardens received almost total approval (97%). When asked whether they intended to implement it within near future, the answer of two-fifths was in the affirmative, whereas one-third said they already had one. Only one-fifth said they could not, though they very much wanted to, for they did not have any land. Though most of respondents were keen on having a kitchen garden, they did not seem very clear about the idea. Thus 95 per cent agreed with the view that "shortage of land does not permit people to have kitchen gardens". At the same time a large majority (82%) also agreed with a different statement (offered to them earlier) that 'it was ignorance and lethargy that prevents people from having kitchen gardens".

An Evaluation Study of Lakshman -- A Nutritional Comic

Parents' Assessment

	Percentages			
	Total sample	EDUCATION		
		Illi-terate	Pri-mary	Above Primary
BASE:	160	74	36	50
Have you seen this book?				
Yes	78	74	78	84
No	22	26	22	16
Total	100	100	100	100
Who brought this book?				
Son	49	59	64	22
Daughter	10	7	11	12
Brother	14	5	8	32
Sister	4	-	-	14
Others	4	3	-	8
Not applicable	22	26	22	16
Base	*	*	*	*
Was your child quite eager to show it to you or did he/she show no marked interest?				
Was quite eager	70	69	61	76
Was not very much interested	2	1	3	4
Can't say/don't remember	6	4	14	4
Not applicable	22	26	22	16
Total	100	100	100	100

*Note: No check: Provision for multiple answers.

	Percentages			
	Total sample	EDUCATION		
		Illi-terate	Pri-mary	Above Primary
Have you read it?				
Yes	21	-	31	44
No	22	-	47	40
Can't read	35	74	-	-
Not applicable	22	26	22	16
Total	100	100	100	100
IF 'YES' How many times?				
Once	19	-	28	42
Twice	-	-	-	-
Thrice	-	-	-	-
Four times	1	-	3	-
More than four times	1	-	-	2
Not applicable	79	100	69	56
Total	100	100	100	100
IF 'NO' & CAN'T READ Did your son read this book to you?				
Yes	36	58	14	20
No	21	16	33	20
Not applicable	43	26	53	60
Total	100	100	100	100
Has he asked you any questions about the book?				
Yes	19	16	22	22
No	59	58	56	62
Not applicable	22	26	22	16
Total	100	100	100	100

If 'Yes' What sort of questions did he ask?	Percentages			
	Total sample	EDUCATION		
		Illi-terate	Primary	Above Primary
About good food and health	10	11	8	10
Question pertaining to story— e.g. About Lakshman, tiger, Jethu	6	5	3	10
About names of fruits and vegetables	2	3	3	2
About kitchen garden	1	-	6	-
What is the book about?	1	-	-	4
No opinion/ Don't remember	1	-	3	-
Not applicable	81	84	78	78
Base	*	*	*	*

*Note: No check: Provision for multiple answers.

You must have observed him reading the book? Does he look more interested in the pictures or has he shown any interest in the story and its message?				
Interested in pictures only	12	8	11	20
Has shown interest in the story also but not in the message	8	7	8	10
Has shown interest in the story and its message	28	28	25	30
Can't say - seldom seen him reading the book	30	31	34	24
Not applicable	22	26	22	16
Total	100	100	100	100

	Percentages			
	Total sample	EDUCATION		
		Illiterate	Primary	Above Primary
Personally how do you find the book? Would you say it is interesting and instructive?				
Both interesting and instructive	43	35	44	52
Instructive but not interesting	2	-	3	6
Neither instructive nor interesting	3	3	-	6
Can't say	30	36	31	20
Not applicable	22	26	22	16
Total	100	100	100	100
What do you think is the message the book conveys to the reader?				
Children should be fed properly from early age - General response	16	12	22	16
Good food is essential for good health - General response	11	7	8	18
Kitchen garden: Everyone should have one; how to have more vegetable without extra cost?	11	7	11	16
One should take more vegetables and fruits	6	4	3	12
Enlightens about the nutritional value of various food stuffs	4	4	5	4
Others — How to overcome dangers	1	-	-	2
Can't say	36	45	39	22
Not applicable	22	26	22	16
Base	*	*	*	*

*Note: No check: Provision for multiple answers.

	Total sample	EDUCATION		
		Illiterate	Primary	Above Primary
Do you think your child could understand this message?				
Yes - Could understand without any help	44	41	42	50
Yes - Could understand fully only after someone else explained the meaning to him	8	5	3	16
No - Has failed to grasp even after explaining	-	-	-	-
No - Has shown no interest in the book	1	-	5	-
Can't say	25	28	28	18
Not applicable	22	26	22	16
Total	100	100	100	100
Has there been any discussion amongst the older members of the family regarding the theme of the book?				
Yes	27	23	28	32
No	45	47	42	46
Can't say - not to my knowledge	6	4	8	6
Not applicable	22	26	22	16
Total	100	100	100	100
Have you discussed what the book says with other people in the village?				
Yes	6	3	8	10
No	72	71	70	74
Not applicable	22	26	22	16
Total	100	100	100	100

Percentages

If 'Yes' What is their reaction?	Total sample	EDUCATION		
		Illi-terate	Primary	Above Primary
Good and instructive book, children would take more interest in such books	2	1	-	4
It aims at inculcating good food habits and is useful for children	1	-	-	4
The Government is trying to educate the children regarding food habits right from the childhood through such books	1	-	-	2
A good book for children but most of the people do not understand much about the story	1	-	3	-
The educated people find the book very instructive and they hope to utilize this knowledge	..	-	3	-
Can't say	1	1	3	-
Not applicable	94	98	91	90
Total	100	100	100	100

Do you think what the book attempts to convey is applicable to your family?				
Yes	52	43	53	64
No	8	11	3	8
Can't say	18	20	22	12
Not applicable	22	26	22	16
Total	100	100	100	100

Would you like to introduce any change in the food habits of the family after reading this book?	Percentages			
	Total sample	EDUCATION		
		Illiterate	Primary	Above Primary
Yes	57	49	53	69
No	4	7	-	4
Can't say	17	18	25	12
Not applicable	22	26	22	16
Total	100	100	100	100

If 'No'
Why? What are your reasons?
Can't have kitchen garden:

No land	2	4	-	-
Scarcity of water	1	1	-	2
Already taking this type of food	1	-	-	2
Can't say	..	1	-	-
Not applicable	96	94	100	96
Total	100	100	100	100

Does the idea of having a kitchen garden appeals to you?

Yes	97	96	100	96
No	3	4	-	4
Total	100	100	100	100

Percentages

If 'No' Why?	Total sample	EDUCATION		
		Illi-terate	Primary	Above primary
No land	1	3	-	-
No time	1	1	-	-
Water shortage	1	-	-	2
No protection against stray cattle	1	1	-	2
Not applicable	97	96	100	96
Base	*	*	*	*

If 'Yes' Would you like to implement this idea in the near future?				
Yes	43	39	42	46
Can't - No land	22	30	16	16
No need - Already have one	32	27	42	34
Not applicable	3	4	-	4
Total	100	100	100	100

Here is a set of statements. Please tell me whether you agree or disagree with these?

THINKING INITIATES ACTION				
Agree	93	89	97	94
Disagree	4	4	3	6
Can't say	3	7	-	-
Total	100	100	100	100

*Note: No check: Provision for multiple answers.

	Percentages			
	Total Sample	EDUCATION		
		Illiterate	Primary	Above Primary
PEOPLE DO NOT HAVE KITCHEN GARDEN BECAUSE OF IGNORANCE AND LETHARGY				
Agree	82	78	92	80
Disagree	17	19	8	20
Can't say	1	3	-	-
Total	100	100	100	100
PROPER FOOD IMPROVES HEALTH AND INTELLIGENCE				
Agree	99	99	100	100
Disagree	-	-	-	-
Can't say	1	1	-	-
Total	100	100	100	100
PROPER FOOD PREVENTS SICKNESS				
Agree	100	100	100	100
Disagree	-	-	-	-
Can't say	-	-	-	-
Total	100	100	100	100
SHORTAGE OF LAND DOES NOT PERMIT MOST PEOPLE TO HAVE KITCHEN GARDENS				
Agree	95	96	97	92
Disagree	5	4	3	8
Can't say	-	-	-	-
Total	100	100	100	100

	Percentages			
	Total sample	EDUCATION		
		Illi-terate	Primary	Above Primary
OCCUPATION				
Owner cultivator	27	38	25	12
Non-owner cultivator	1	-	3	-
Artisan 'Karigar', Carpenter, Blacksmith (Skilled workers)	28	24	45	22
Unskilled worker	13	15	5	16
Shopkeeper	10	7	14	14
White collar workers	10	5	5	22
Housewife	6	11	3	2
Student	5	-	-	16
Total	100	100	100	100
FAMILY INCOME				
Upto Rs.60 per month	5	5	6	2
61 - 90	5	7	3	2
91 - 120	11	18	8	4
121 - 150	20	23	17	16
151 - 200	14	14	20	12
201 - 300	17	12	22	20
301 - 500	14	8	11	26
501 - 750	8	5	5	14
751 - 1000	2	1	5	2
Above 1000	3	4	3	2
Refusal	1	3	-	-
Total	100	100	100	100

SIZE OF LAND HOLDINGS (in Acres)	Percentages			
	Total sample	EDUCATION		
		Illi-terate	Primary	Above Primary
Upto half	12	9	14	16
One	9	8	8	10
Two	12	7	14	20
Three	6	8	8	2
Four	4	7	3	2
Five	3	4	-	4
5 - 7½	6	7	3	6
7½ to 10	4	4	3	4
11 - 15	3	3	5	-
16 - 20	-	-	-	-
More than 20	1	1	-	-
Nil (No land)	40	42	42	36
Total	100	100	100	100
SIZE OF FAMILY				
One	-	-	-	-
Two	-	-	-	-
Three	2	4	-	-
Four	5	3	5	8
Five	7	9	5	6
Six	13	16	3	16
Seven	8	9	8	6
Eight	10	11	17	4
Nine	4	3	3	8
Ten	10	9	17	6
Above ten	41	36	42	48
Total	100	100	100	100

SECTION III

TEACHERS' EVALUATION

On Distribution

The reaction of school teachers to the book, on survey evidence, was remarkably favourable. There was almost total absence of resistance to its distribution: the few who were rather lukewarm objected to its distribution only because of the terminal examinations scheduled to start a couple of days after the survey was put in the field. The distribution of the book, in their opinion, had 'disturbed their course of studies', for the attention of students had been fastened to this book. "They (students) have read nothing else since they got this book", some teachers complained.

The favourable responses to questions regarding distribution, however, are subject to one qualifying factor. Due to the compulsions of time, the representative of CARE had personally supervised the distribution of books to children. As a result none of the teachers had read the book before its distribution amongst school-children which they otherwise might have done.

The survey, therefore, does not provide an answer to the question: what would happen to the books if they are left with the school headmaster with a request for its distribution amongst school children? Would all the books reach the persons for which they were intended?

Children's Interest in the Book —Teachers' Testimony

A measure of the extent and nature of interest the book aroused amongst children can also be had from the responses of teachers to relevant questions. Most of the teachers who had read the book to their classes testified that students asked questions after they had finished reading. Some came to them for explaining certain points; quite a few asked questions, largely pertaining to the theme of the book.

The kind of questions the students asked indicate the book was fairly successful in making children more inquisitive regarding its nutritional theme. These questions make interesting reading, especially those pertaining to food and kitchen garden: "How can meat be good for health when we were told it was harmful? Can we kill a tiger if we take good food? How can poor people afford milk? Why should we have a kitchen garden when we can cultivate vegetables in our fields? How can the landless have a kitchen garden?"

Evaluation of the Book

The book on the whole was rated high by teachers: they discussed it, praised it both in regard to contents and technique, and offered constructive criticism and suggestions for its improvement.

Most of the teachers (23 out of 29) testified that after going through the book they discussed it with their colleagues. The discussions, on their evidence, centred largely on the impact the book was likely to create on the nutritional

awareness of children and the effective technique (pictorial presentation) employed to convey the theme.

The responses to certain other questions, designed to elicit teachers' evaluation on separate counts, indicate the book, on teachers testimony, would succeed in getting its message across to a large extent. Thus there was an almost total agreement (28 out of 29) amongst the teachers interviewed that the book was both "interesting and instructive". The structure of opinion on this point, however, underwent a change when the question was differently worded: "Would you say that the main interest of the child is fastened to the story only and the message of the book is lost on him? Or do you think the message is effectively conveyed to the child?" Two in three teachers could say with a fair amount of certainty that the book succeeded in effectively conveying the message whereas one in three thought the main interest of the child was fastened to the story and the message was lost on him. One teacher was of the view that it depends on the age of the child; the younger students (in Class II & III) were lost in the story while the older ones could grasp the message. This minority opinion, as the structure of students' responses indicate, seems to be nearer the truth.

Almost the same pattern of opinions is observed in regard to the book's success in adding to nutritional awareness of the children and the impetus this increased awareness is likely to give to positive action on their part. Two in three

teachers were of the view that the book would add to this awareness that was likely to result in some positive action.

Another measure of the value the teachers put on the book is provided in their willingness not only to read this or similar books in the class once in a month, but in their not being averse to the idea of making such books part of the curriculum for primary students. This would, in their opinion, ensure regular reading by students who otherwise were likely to 'forget the book and what it conveys' after a few days.

Criticism and Suggestions

More teachers offered suggestions for improvement than criticism. These suggestions, as is natural, were largely based on their criticism. A section of the teachers felt the print type used was too small for children; a bold type, in their opinion, would make for easier reading, not only for the children but their parents as well.

Another criticism was in regard to the sequence of pictures; some teachers suggested the pictures should be serialised to make the sequence easier to follow. There were others who were of the view that synopsis of the story should be presented on the first page and all the characters introduced right in the beginning. Another interesting suggestion was that the contrast between a well-fed and ill-fed person should be pictorially highlighted. A few teachers held that the book would be much more useful if pictures of various vegetables and fruits were prominently displayed and there was more emphasis on

the time, the type of soil where these can be grown. There were other suggestions, offered by a few teachers, one of which may be worth considering. One teacher suggested that the name Lakshman should be changed as children are likely to confuse it with Lakshman of Ramayana. The criticism regarding 'nude' pictures, though offered by a few teachers and observed in the case of some children interviews, suggests that an image of 'alien characters' has registered with some readers.

An Evaluation Study of "Lakshman" — A Nutrional Comic

Teachers' Assessment

You must have seen this book. Did you personally distribute this book amongst pupils?	Actuals
Yes	25
No	4
Total	29

IF 'NO'
Who distributed the book?

Other teachers	4
Not applicable	25
Total	29

IF 'YES'
Did you like the idea of distribution of this sort of book amongst school children?

Yes - liked	25
No - did not like	-
Indifferent	-
Not applicable	4
Total	29

Was there any discussion amongst teachers about distribution?

Yes	16
No	11
Can't say --Was on leave	2
Total	29

IF 'YES'
What was it like?

	Actuals
Such books should be widely distributed for they effectively convey the central idea	10
Wondered about the purpose of distribution	6
Such books disturb our course of study	2
Convenient and easy for teachers to teach such books	1
Not applicable	13
Base	29*

Did you read the book before its distribution amongst students?

Yes	-
No	29
Total	29

How many times have you gone through the book?

One	19
Two	5
Three	3
Four	2
Total	29

Did you read out this book to the children of your class?

Yes	22
No	7
Total	29

Did they ask you any questions regarding the book after you had finished reading?

	Actuals
Yes	18
No	4
Not applicable	7
Total	29

If 'Yes'
What sort of questions did they ask?

Pertaining to story: who was Lakshman? How could he kill a tiger when his father could not? Why was Phalguni popular?	8
About names: vegetables, fruits, tiger animal names	6
Regarding food: what type of food one should take? How could meat be good for health when we were told it was harmful? Can we kill a tiger if we take good food? How can poor people afford milk?	6
Regarding theme: What is the message of the book?	3
Kitchen Garden: Why should we have a kitchen garden when we can cultivate vegetables in our field? How can landless cultivate kitchen garden?	2
No specific answer	2
Not applicable	11
Base	29*

Did they ask any questions regarding the message of the book?

Yes	14
No	10
Not applicable	5
Total	29

*Note: No check: Provision for multiple answers.

Did any child afterwards come to you for explaining any point in the book?

	Actuals
Yes	11
No	18
Total	29

Has there been any discussion amongst your colleagues regarding the Book?

Yes	23
No	6
Total	29

IF 'YES'
What did you discuss about the book?

Praised in general terms - useful, good book	5
Praised with reference to the theme: Would increase knowledge and awareness of nutrition	11
Praised the effective manner/technique with which the theme is conveyed to the children: pictorial presentation	4
Message of the book should be widely propagated	1
About unfamiliar names of vegetables and wrong spellings	1
Can't say	1
Not applicable	6
Total	29

What is your personal opinion of the book? Do you think children find it interesting and instructive?

	Actuals
Both interesting and instructive	28
Instructive but not interesting	-
Neither instructive nor interesting	-
Can't say	1
Total	29

Let me see if I have understood you correctly. Would you say that the main interest of the child is fastened to the story only and the message of the book is lost on him? Or do you think the message is effectively conveyed to the child?

Interest is fastened to the story only	9
Message is effectively conveyed	19
Depends: Students in the II Standard interested in the story only but to those in the IVth & Vth Standards the message is effectively conveyed	1
Total	29

Do you think books like this would add to the nutritional awareness of the children and their people at home?

Yes - to a large extent	20
Yes - to some extent	8
No - Not at all	1
Total	29

Do you feel the increase in such awareness would lead to any positive action?

Yes	25
No	-
Depends: On economic conditions, parents attitude	4
Total	29

Here is a set of statements. Please tell me whether you agree or disagree with these.	Actuals
Thinking initiates action	
Agree	29
Disagree	-
Total	29
People do not have kitchen garden because of ignorance and lethargy	
Agree	26
Disagree	3
Total	29
Proper food improves health and intelligence	
Agree	29
Disagree	-
Total	29
Proper food prevents sickness	
Agree	28
Disagree	1
Total	29
Shortage of land does not permit most people to have kitchen gardens	
Agree	22
Disagree	5
Agree in regard to urban areas	2
Total	29

Do you have a kitchen garden in your home?	Actuals
Yes	15
No	14
Total	29

What is your main criticism of the book?

Print type — too small for children	3
Children lose sequence of pictures for they are not clear which way to read	2
Some nude pictures do not leave good impression on the children	2
Certain spellings not right - Lakshaman for instance	2
Unfamiliar names of certain vegetables and fruits	1
The 'slogans' on each page break the continuity of the story	1
None	18
Total	29

Have you any suggestions for improving the form or contents of books of this kind?	Actuals
Bold type face: to enable both children and their neo-literate parents understand the contents	8
Detailed description and pictorial presentation of various vegetables and their nutritional contents	4
Synopsis of the story should be presented on the front page	3
More emphasis on the knowledge regarding the time, the seeds, the type of soil where various vegetables can be grown	3
Pictures should be serialised so that children can follow the sequence	2
Contrast between a well-fed and ill-fed persons should have been pictorially high-lighted	2
Should be more descriptive: Central idea should be presented in greater detail	1
All the characters should be introduced in the beginning	1
Name Lakshman should be substituted for children confuse him with Lakshman of Ramayana	1
Should be in 'Question - Answer' form	1
Language should be simple	1
Volume should be large	1
No suggestion	9
Base.	29*

In your opinion would it be worthwhile if this book is widely distributed?	
Yes	28
No	1
Can't say	-
Total	29

*Note: No check: Provision for multiple answers.

Would you like similar books to be read and discussed in the class at least once a month?	Actuals
Yes	27
No	2
Total	29

Would you like this book or similar book to be a part of the curriculum for primary students?	
Yes	27
No	2
Total	29

Why do you think so?

'YES' - REASONS

Regular reading would ensure greater nutritional awareness and would leave an impact on their food habits	11
Such books are not read in the regular course; because of pictorial presentation children grasp the message quickly; they find them more interesting	9
Regular reading: Otherwise children are likely to forget it after a few days	7
We can officially devote more time	1

'NO' - REASONS

Attention of students is diverted from other subjects	1
Students would lose interest in the subject as it would become 'routine' reading'	1
Base	29*

*No check: Provision for multiple answers.